WE CLAIM:

1. A synchronization system for time-based synchronization of streaming media transmitted over a communications network, comprising:

an input interface adapted for linking to the communications network to receive a first and a second media stream, wherein the first and second media streams comprise a plurality of digital data packets being transmitted over the communications network from a first and a second media source, respectively;

a first data buffer for storing the data packets of the first media stream;

a second data buffer for storing the data packets of the second media stream; and

a controller communicatively linked to the first and the second data buffers for selectively retrieving the data packets of the first and second media streams to form a first and a second time-adjusted stream, wherein the controller determines a variable transmission delay for the first and the second media streams and performs the selective retrieving based on the determined variable transmission delays;

wherein the controller is further configured for combining the first and second time-adjusted streams into a composite media stream.

2. The system of claim 1, wherein the first and the second media streams include a streaming video portion.

3. The system of claim 2, wherein the streaming video portion of the first media stream is compressed based on a first compression format and the second media stream is compressed based on a second compression format, the second compression format differing from the first compression format.

4. The system of claim 3, further including a decoding device between the input interface and the first and second data buffers for processing compressed first and second media streams into a first decoded stream and a second decoded stream, respectively, for storage in the first data buffer and the second data buffer, wherein the first decoded stream and the second decoded stream have compatible formatting.

5. The system of claim 1, wherein the controller forms the composite media stream by combining the first and the second time-adjusted streams such that the second time-adjusted stream has a first data packet positioned at a start time adjacent a last data packet of the first time-adjusted stream positioned at an end time.

6. The system of claim 5, wherein the controller is communicatively-linked to an external timing reference for receiving a reference time value, and wherein the controller is adapted for using the reference time value to determine the start time and the end time.

7. The system of claim 5, wherein the controller determines a length of the first media stream, compares the length with the end time and the variable network delay, computes an edit length for the first media stream, and compresses or lengthens the first media stream to form the first time-adjusted stream, whereby the last data packet coincides with the end time.

8. The system of claim 1, further including a data parsing device in communication with the input interface configured for retrieving time data from the first and the second media streams and for transmitting the time data to the

controller, wherein the controller uses the time data to determine variable transmission delays.

9. The system of claim 7, wherein the controller is adapted to create media server control signals based on the determined variable transmission delays and to transmit the signals over the communications network to the first and the second media sources to control transmission variables of the first and second media streams.

10. The system of claim 9, wherein the transmission variables are selected from the group consisting of transmission timing, transmission rate, and transmission length.

11. The system of claim 1, wherein the composite media stream comprises a streaming video portion having picture-in-picture or side by side portions formed with the data packets of the first and the second time-adjusted streams.

12. The system of claim 1, wherein the controller combines the first media stream and second media stream in the composite media stream such that a data packet transmitted in the first media stream from the first media source at a transmission time is matched with a corresponding data packet in the second media stream transmitted from the second media source at the transmission time.

13. The system of claim 12, wherein the combining is performed by the controller by selecting a transmission rate for the first and the second media streams to correct for the determined variable transmission delays.

14. The system of claim 1, further including an output interface for transmitting the composite media stream from the controller over the communications network and including an end-user node linked to the communications network for receiving the composite media stream, wherein the end-user node comprises a synchronizer for determining a variable transmission delay between the controller and the end-user node and for performing time-based correction of the composite media stream to adjust for the variable transmission delay.

15. An apparatus for synchronizing media streams transmitted over a communication network, comprising:

an input interface linked to the communications network and configured for receiving a first and a second media stream transmitted by a first and a second media source, respectively, wherein the first media stream comprises a plurality of data packets encoded to a first compression standard and the second media stream comprises a plurality of data packets encoded to a second compression standard differing from the first compression standard;

a decoder for decoding the first and the second media streams into a first and a second intermediate media stream, respectively, wherein the first and second intermediate streams are compatibly formatted; and

a streaming media processor for combining the first and the second intermediate-format media streams into a composite media stream encoded according to an output compression standard.

16. The apparatus of claim 15, further including a controller in communication with the input interface and the streaming media processor

adapted for determining a variable transmission delay for the first and the second media streams based on a transmission time for a data packet of the first media stream and a time of receipt at the input interface of the data packet and on a transmission time for a data packet of the second media stream and a time of receipt at the input interface of the data packet.

17. The apparatus of claim 16, wherein the controller is further configured for adjusting the first intermediate-format media stream based on the variable transmission delay of the first media stream and for adjusting the second intermediate-format media stream based on the variable transmission delay of the second media stream to create a first and a second time-adjusted stream.

18. The apparatus of claim 17, wherein the processor combines the first and second time-adjusted stream to form the composite media stream with the first media stream data packet and the second media stream data packet being positioned for concurrent delivery.

19. The apparatus of claim 17, wherein the time of receipt is determined based on a time reference signal received from an external timing reference.

20. A method for time-based synchronization of two or more media streams transmitted over a data communications network, comprising:

receiving a first media stream comprising a plurality of data packets transmitted over the communications network by a first media source;

receiving a second media stream comprising a plurality of data packets transmitted over the communications network by a second media source; and

creating a synchronized media stream by combining the first and the second media streams.

21. The method of claim 20, further including:

retrieving timing data from the first and second media stream;

comparing the timing data with a reference time to determine a first and a second transmission delay value; and

adjusting the first and the second media streams to correct for the first and the second transmission delay values.

22. The method of claim 21, wherein the adjusting includes creating a first and a second control signal in response to the first and the second transmission delay values, respectively, and includes transmitting the first and the second control signals to the first and the second media source to control transmittal of the first and the second media streams.

23. The method of claim 21, storing the data packets of the first media stream in a first data buffer and the data packets of the second media stream in a second data buffer and wherein the adjusting includes selectively retrieving the data packets of the first media stream from the first data buffer to correct for the first transmission delay value and selectively retrieving the data packets of the second media stream from the second butter to correct for the second transmission delay value.

24. The method of claim 21, wherein the adjusting includes matching the data packets of the first and the second media streams based on transmittal times from the first and the second media sources, respectively, whereby the first

and the second media streams are presented in the synchronized media stream concurrently.

25. The method of claim 20, wherein the first media stream is encoded to a first compression standard and the second media stream is encoded to a second compression standard, and further including forming a first intermediate data stream by decoding the first media stream and forming a second intermediate data stream by decoding the second media stream, wherein the first and second intermediate data streams are compatibly formatted.

26. The method of claim 25, wherein the first compression standard differs from the second compression standard such that the first and second media stream are incompatible prior to the decoding to be combined into a single media stream.